IN THE CLAIMS:

Claims 6 - 10, 12 - 17, 19, 21, 22, 26 - 30 and 32 - 46 have been cancelled. Claims 57 - 59 have been added. Claims 1 - 3, 18, 20, 23 - 24, 47, and 52 - 53 have been amended, as follows:

1. (currently amended) A power converter, comprising:

an input voltage system to receive ~~a plurality of input voltages~~ an AC input voltage and to output a [[single]] switched voltage; [[and]]

a transformer, coupled to said input voltage system, to receive the [[single]] switched voltage and to output ~~a transformed~~ an intermediate voltage, said transformer having a primary winding and a secondary winding[[,]] and

a boost circuit, coupled to the transformer, to receive the intermediate voltage and output a transformed voltage,

wherein said secondary winding of said transformer is configured as a boost inductor in the boost circuit.

2. (currently amended) The power converter of claim 1, wherein the power converter is capable of receiving a DC input voltage ~~plurality of input voltage is input one at a time~~.

3. (currently amended) The power converter of claim [[1]] 2, wherein the ~~plurality of input voltages~~ the DC input voltage is input simultaneously with the AC input voltage.

4. (original) The power converter of claim 1, further including a buck regulator to receive the transformed voltage, to generate a regulated voltage, and to output the regulated voltage as an output voltage.

5. (original) The power converter of claim 4, further including an error correction system to receive a programming voltage and the regulated voltage, and to output a correction signal to the buck regulator based on a desired ratio between the programming voltage and the regulated voltage.

Claims 6 -10 (cancelled).

11. (original) The power converter of claim 4, further including an error correction system to receive a programming current and a regulated current, and to output a correction signal to the buck regulator based on a ratio between the programming current and the regulated current.

Claims 12 - 17 (cancelled).

18. (currently amended) The power converter of claim [[17]] 2, wherein the DC input voltage is provided from the group consisting of an airplane, a car, and a battery.

Claim 19 (cancelled).

20. (currently amended) The power converter of claim [[19]] 1, wherein the input voltage system includes,

an external AC source to provide ~~the one of the plurality of input voltages~~ the AC input voltage,

a voltage rectifying system to receive ~~the one of the plurality of input voltages~~ AC input voltage and to output a rectified input voltage,

a driver to supply a driving signal with a duty cycle, and

a switching device to receive the rectified input voltage and the driving signal, to utilize the duty cycle of the driving signal to turn on and off the switching device to produce a switched voltage that is input to the primary winding of the transformer.

Claims 21 and 22 (cancelled).

23. (currently amended) The power converter of claim [[21]] 58, wherein the ~~plurality of input voltages~~ AC input voltage is input to the power converter simultaneously with the DC input voltage.

24. (currently amended) The power converter of claim [[21]] 58, further including a buck regulator to receive the [[DC]] transformed voltage, to generate a regulated voltage, and to output the regulated voltage as an output voltage.

25. (original) The power converter of claim 24, further including a voltage error system to receive a programming voltage and the regulated voltage, and to output a voltage correction signal to the buck regulator based on the ratio between the programming voltage and the regulated voltage.

Claims 26 - 30 (cancelled)

31. (original) The power converter of claim 24, further including an error correction system to receive a programming current and a regulated current, and to output a correction signal to the buck regulator based on a ratio between the programming current and the regulated current.

Claims 32 - 46 (cancelled).

47. (currently amended) A method to output a regulated voltage ~~and a regulated current~~ from a power converter, comprising:

receiving ~~a plurality of input voltages~~ an AC input voltage at an input voltage system and outputting therefrom a [[single]] switched voltage;

receiving the [[single]] switched voltage at a transformer, the transformer including a primary winding and a secondary winding; [[and]]

outputting an intermediate voltage from the transformer;

receiving the intermediate voltage at a boost circuit coupled to the transformer; and

outputting a transformed voltage from the boost circuit, wherein [[a]] the secondary winding of the transformer is configured as a boost inductor in the boost circuit.

48. (original) The method of claim 47, further including receiving the transformed voltage at a buck regulator;

creating a regulated voltage at the buck regulator; and

outputting the regulated voltage and a regulated current as an output voltage and an output current.

49. (original) The method of claim 48, further including receiving a programming signal at an error correction system;

receiving regulated signals at the error correction subsystem;

comparing the programming signal with one of the regulated signals to determine if the one of the regulated signals to programming signal ratio is within an acceptable range; and

outputting a correction signal if the one of the regulated signals to programming signal ratio is outside the acceptable range.

50. (original) The method of claim 49, wherein the programming signal is a voltage programming signal and the one of the regulated signals is a regulated voltage.

51. (original) The method of claim 49, wherein the programming signal is a current programming signal and the one of the regulated signals is a regulated current.

52. (currently amended) A method to output a regulated voltage ~~and a regulated current~~ from a power converter that is capable of receiving an AC input voltage and a DC input voltage, comprising:

~~receiving a plurality of input voltages and outputting therefrom a single voltage;~~

receiving a DC input voltage at a center tap of a transformer, the transformer including a primary winding and a secondary winding, the center tap of the transformer separating the secondary winding of the transformer into a first autowinding and a second autowinding;

~~receiving the single voltage at a transformer;~~

charging a first capacitor to the DC input voltage by coupling the DC input voltage across the first capacitor;

~~providing one of the plurality of input voltages at a center tap of a secondary winding of the transformer;~~

~~outputting a transformed voltage;~~

~~receiving the transformed voltage at a rectifier; and~~

~~outputting a DC voltage~~

charging a second capacitor to a DC voltage by utilizing a control circuit and switching devices to control the first autowinding and the second autowinding of the transformer to apply the input DC voltage across the second capacitor; and

adding, at a first node, the DC input voltage and DC voltage to generate a transformed voltage.

53. (currently amended) The method of claim 52, further including receiving the [[DC]] transformed voltage at a buck regulator;

creating a regulated voltage at the buck regulator; and

outputting the regulated voltage and a regulated current as an output voltage and an output current.

54. (original) The method of claim 53, further including receiving a programming signal at an error correction system;

receiving regulated signals at the error correction system;

comparing the programming signal with one of the regulated signals to determine if the one of the regulated signals to programming signal ratio is within an acceptable range; and

outputting a correction signal if the one of the regulated signals to programming signal ratio is outside the acceptable range.

55. (original) The method of claim 54, wherein the programming signal is a voltage programming signal and the one of the regulated signals is a regulated voltage.

56. (original) The method of claim 54, wherein the programming signal is a current programming signal and the one of the regulated signals is a regulated current.

57. (new) A power converter capable of receiving an AC input voltage and a DC input voltage, comprising:

a transformer, said transformer coupled to a switching circuit which is utilized when the power converter receives the AC input voltage and said transformer including

a primary winding and a secondary winding; and

a boost circuit, coupled to the transformer, to receive the DC input voltage from a DC input source, to utilize the secondary winding of the transformer as a boost inductor, and to output a transformed voltage, wherein the transformed voltage has a higher magnitude than the DC input voltage.

58. (new) A power converter capable of receiving an AC input voltage and a DC input voltage, comprising:

a first capacitor, coupled to the DC input voltage, which is charged to the DC input voltage;

a transformer, coupled to a primary switching circuit and utilized if an AC input voltage is supplied, said transformer having a primary winding and a secondary winding where the secondary winding includes a center tap to separate the secondary winding into a first autowinding and a second autowinding, the DC input voltage being coupled to the center tap of the transformer; and

a control circuit coupled to switching devices, the switching devices coupled to the secondary winding, wherein the control circuit and the switching devices control the first autowinding and the second autowinding to charge a second capacitor to a DC voltage, wherein the DC input voltage and the DC voltage are added together to create a transformed voltage at a first node.

59. (new) A method to output a regulated voltage from a power converter that is capable of receiving an AC input voltage and a DC input voltage, comprising:

receiving, at a boost circuit, the DC input voltage from a DC input source; and

increasing a magnitude of the DC input voltage by utilizing the boost circuit to

boost the DC input voltage to output a transformed voltage, wherein

the boost circuit is coupled to a transformer having a primary winding and a secondary winding, and the boost inductor utilizes the secondary winding of the transformer as a boost inductor.